Title (en)

FERRITIC STAINLESS-STEEL SHEET AND METHOD FOR MANUFACTURING SAME

Title (de)

FERRITISCHES ROSTFREIES STAHLBLECH UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

TÔLE EN ACIER INOXYDABLE À BASE DE FERRITE, ET PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication

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Application

**EP 18873329 A 20181016**

Priority

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Abstract (en)

[origin: EP3666917A1] The present invention provides a ferritic stainless steel sheet which has more excellent toughness and excellent corrosion resistance, and a method for manufacturing the same. A ferritic stainless steel sheet has a composition containing C: 0.001 to 0.020%, Si: 0.05 to 0.35%, Mn: 0.05 to 1.00%, P: 0.04% or less, S: 0.01% or less, Al: 0.001 to 0.300%, Cr: 10.0 to 13.0%, Ni: 0.75 to 1.50%, Ti: 0.05 to 0.35%, and N: 0.001 to 0.020%, with the balance being Fe and inevitable impurities, in which γ<sub>I</sub>[%] represented by formula (1) below is 65% or more, and a metal structure has an average crystal grain size of 45 μm or less:γI%=24Ni+12Mn+6Cu−18Si−12Cr−12Mo+188where Ni, Mn, Cu, Si, Cr, and Mo represent contents of the respective elements (percent by mass), and an element not contained represents 0. The ferritic stainless steel sheet is manufactured by subjecting a steel slab having the composition to hot rolling, and performing hot-rolled sheet annealing at 750 to 1,050°C.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

- [A] JP 2006328524 A 20061207 - NIPPON STEEL & SUMIKIN SST
- [AD] JP 2016191150 A 20161110 - NIPPON STEEL & SUMIKIN SST
- [A] JP 2007016310 A 20070125 - JFE STEEL KK
- [E] WO 2018199062 A1 20181101 - JFE STEEL CORP [JP]
- See references of WO 2019087761A1

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